

### **Abstract**

The invention discloses a method for directly separating and purifying polyhydroxyalkanoates in cells from fermentation liquid and it relates to the field of posttreatment technology of biological engineering. The method includes following steps: pretreating fermentation liquid with physical method for breaking cell wall; adjusting pH value of pretreated fermentation liquid to alkaline; adding anionic surfactant; reacting under agitation; separating and extracting coagulated precipitate from reaction liquid; washing and drying. The invention has the advantage of simple technology, low cost, high extraction yield and no pollution, and large scale industrialized production can be realized.